

further in view of Siemens (GB 468,827); Claims 30-32, 34, and 35 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lipo in view of Nikitin, and further in view of Elton et al (U.S. Patent No. 5,036,165, hereinafter Elton); and Claim 33 was rejected under 35 U.S.C. §103(a) as being unpatentable over Lipo in view of Nikitin and Elton, and further in view of Penczynski et al (U.S. Patent No. 3,959,549, hereinafter Penczynski).

Claim 35 has been amended by way of the present amendment to require that at least one pair of adjacently located winding parts in a same slot are displaced in the circumferential direction relative to one another. It is respectfully submitted that the amendment to Claim 35 is supported by the specification as originally filed, and thus, adds no new matter.

Prior to addressing the rejections on the merits, a review of the present invention is believed to be in order. The present invention is directed to a machine that can be directly connected to a high-voltage network without the need for an intermediate transformer. To achieve such high voltages, the present invention employs windings of a high-voltage cable. The windings are displaced in a radial direction. In order to achieve the voltage levels of the present invention, many turns of the winding are required, thereby increasing the size of the machine. A feature of the present invention is an approach to compacting the adjacent turns of the winding in a radial direction. As shown in Figure 2, adjacent turns of the winding in a radial direction are displaced in a circumferential direction. This concept is further illustrated in Figure 7. Because the turns of the winding are displaced in a circumferential direction, the radial extent of the many turns of the winding is minimized.

Independent Claim 18 is directed to a rotating electric machine that includes, *inter alia*, an electric winding with a plurality of winding parts where at least some of the plurality of winding parts are located radially displaced in relation to one another. Furthermore, at least one pair of adjacently located winding parts in a same slot are displaced in the circumferential direction relative to each other.

Lipo is directed to a variable reluctance drive system including a motor having a salient pole rotor and a salient pole stator having one or more full pitch windings.¹

Nikitin is directed to a stator of a generator including a winding of a high-voltage element where subsequent turns of the winding are divided by spacers arranged in the slots of the stator.²

Compared to Lipo and Nikitin, Claim 18 requires that at least one pair of adjacently located winding parts in a same slot be displaced in a circumferential direction relative to each other. As discussed above, this concept is illustrated, for example, in Figures 2 and 7. Neither Lipo nor Nikitin teach or suggest radially compacting the winding by displacing adjacent turns in a circumferential direction, as required by Claim 18. Accordingly, it is respectfully submitted that no matter how Lipo and Nikitin are combined, the combination fails to teach or suggest the invention defined by independent Claim 18, or Claims 19-21 and 24-26 dependent therefrom.

Siemens is asserted for its teaching of at least one of the plurality of slots being partially curved in a transverse direction in the rejection of Claims 22, 23, and 27-29. However, there is nothing in Siemens that would cure the above-described deficiencies regarding the proposed combination of Lipo and Nikitin. Consequently, it is respectfully submitted that no matter how Lipo is combined with Nikitin and Siemens, the proposed combination fails to teach or suggest the invention defined by independent Claim 18, or Claims 22, 23, and 27-29, dependent therefrom.

Elton is asserted for its teaching of the flexible electric conductor in the rejection of Claims 30-32, 34, and 35. Applicant respectfully traverses the assertion that the electric conductor described in Elton would be flexible. Moreover, there is nothing in Elton that would cure the above-described deficiencies regarding the proposed combination of Lipo and Nikitin. Consequently, it is respectfully submitted that no matter how Lipo is combined with Nikitin and

¹See Lipo, abstract.

²See Nikitin at column 1, line 65 - column 2, line 3.

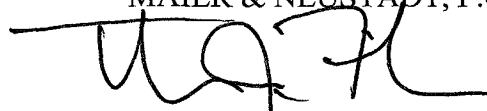
Elton, the proposed combination fails to teach or suggest the invention defined by independent Claim 18, or Claims 30-32, and 34, dependent therefrom. Because independent Claim 35, as amended, includes the features relevant to the discussion above regarding the proposed combination of Lipo and Nikitin, it is respectfully submitted that Claim 35 also patentably defines over a combination of Lipo, Nikitin, and Elton.

Penczynski is asserted for its teaching of various physical properties of a semiconducting layer in the rejection of Claim 33. Aside from these various physical properties, there is nothing in Penczynski that would cure the above-described deficiencies regarding the proposed combination of Lipo, Nikitin, and Elton. Consequently, it is respectfully submitted that no matter how Lipo is combined with Nikitin, Elton, and Penczynski, the proposed combination fails to teach or suggest the invention defined by independent Claim 18, or Claim 33, dependent therefrom.

Consequently, in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 18-35, as amended, is patentably distinguishing over the asserted prior art. The present application is therefore believed to be in condition for formal allowance, and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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